

A Descriptive Study to Assess the Prevalence of Alcoholism Among People Residing in Village Lakhnour, Mohali, Punjab

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Abstract:

Introduction: Alcohol was a part of meal as well as staple in many cultural diets. In addition it was used in celebration of birth and other ceremonies. The use of drug, including alcohol began as a part of tribal ritual. As people became aware of tension reducing and relaxation properties of these substances their use for this purpose increased. In early times alcohol was used to cleanse wounds, as an anesthetic and as an ingredient in salves and tonics. Alcohol was considered to be a divine drink, but gradually its use become more and more common in public leading to opening of the liquor shops in almost every part of universe. People started an indiscriminate use of alcohol leading to various health problems in them and their families. About 2 billion people worldwide consume alcoholic drinks. Over 76 million people are currently affected by alcohol used disorder such as alcohol dependence and abuse. According to 2015 National Survey on Drug Use and Health (NSDUH), 86.4% people ages 18 or older reported that they drank alcohol at some point in their lifetime.

Aims: This study aims to,

1. To assess the prevalence of alcoholism among people residing in village Lakhnour, Mohali.
2. To find the association between the prevalence scores of alcoholic subjects with their demographic variables.

Materials and methods: A descriptive study was conducted to assess the prevalence of alcoholism among men residing in village Lakhnour, Mohali,

Punjab. After getting permission from the area in-charge, a survey was done using a AUDIT questionnaire including socio-demographic variables. Lakhnour is a village of 168 houses with a population of 1080. Out of 168 houses, 76 houses have alcoholics. Random sampling technique was used and the data was collected from 76 subjects in the age group of 30-80 yrs in the month of October 2018. The total score is 40 and it is divided into low risk (0-7), moderate risk (8-15), high risk (16-19) and very high risk (>20) alcoholics. A written consent was obtained from the subjects before conducting the study. The collected data was analysed by using descriptive statistics.

Results: The results shows that most of the alcoholics are males (100%) in the age group from 30-40 yrs (35%), are farmers (38.1%) and have family income of Rs.10,000-Rs.20,000 (77.6%). Majority of the men 34 (44.7%) are high risk alcoholics, 32 (42.1%) are very high risk alcoholics and 10 (13.1%) are moderate risk alcoholics. The study also shows that there is no significant association between the prevalence scores of alcoholic subjects and their demographic variables at the level of $p > 0.05$ significance.

Conclusion: Alcohol damages the liver, heart, pancreas, lungs and kidneys. People who consume it are more prone to infections and have poor immunity. They tend to suffer from hypertension, obesity, diabetes, kidney failure, prostate and urology cancers. Hence alcoholism is a serious threat to the health of the country and proper action is needed at the grass-root level.

Keywords: Alcohol; Prevalence; Consumption, Risk factor.

Introduction

India's annual alcohol intake increased by 38 percent between 2010 and 2017, which has found the total volume of alcohol consumed globally per year has risen by 70 percent since 1990. The study of 189 countries alcohol intake between 1990-2017 and estimated intake up to 2030 suggests that the world is not on track to achieve targets against harmful alcohol use. Between 2010-2017, alcohol consumption in India increased by 38 percent from 4.3 to 5.9 litres per adult per year. Over the same timescale, consumption increased slightly in the US (9.3-9.8 litres) and in China (7.1-7.4 litres). As a result of increased alcohol consumption and population growth, the total volume of alcohol consumed globally per year has increased by 70 percent from 20,999 million litres in 1990 to 35,676 million litres in 2017. The estimates suggest that by 2030 half of all adults will drink alcohol, and almost a quarter (23 percent) will binge drink at least once a month. Alcohol is a major risk factor for disease, and is causally linked to over 200 diseases, in particular non-communicable diseases and injuries.²

Globally alcohol consumption is set to increase from 5.9 litres pure alcohol a yr per adult in 1990 to 7.6 litres in 2030. However, intake varied regionally, between 2010-2017, consumption increased by 34 percent in south east asia (from 3.5 litres to 4.7 litres) with increase in India, Vietnam and Myanmar.¹

According to the National Drug Survey 2019 released by the Union Ministry of Health, Households in India, on an average, consumed 0.18 L of all alcoholic beverages every month (0.22L in rural areas, 0.10 L in urban areas). The absolute quantity of alcohol consumed was higher among the higher income groups in both rural and urban areas. More than half of Punjabi men drink alcohol and the state also houses the highest proportion of children consuming psychoactive substance. Experts say there is considerable heterogeneity regarding prevalence of alcohol use in the country and the states with high prevalence of alcohol use are Chattisgarh (35.6%), Tripura (34.7%) and Punjab (28.5%).²

Finer details of the study reveals that Indians are heavy drinkers. That's evident from the choice of beverage-high-concentration products are preferred over low concentration ones-as well as from the amount of alcohol consumed on a single occasion.⁵

Statement of the problem

A descriptive study to assess the prevalence of

alcoholism among people residing in Village Lakhnour, Mohali, Punjab.

Objectives of the study

1. To assess the prevalence of alcoholism among people residing in village Lakhnour, Mohali.
2. To find the association between the prevalence scores of alcoholic subjects with their demographic variables.

Hypothesis

H₀: There is no significant association between the prevalence scores of alcoholics with their selected demographic variables.

Materials and Methods

Research approach and design

Quantitative research approach and descriptive design was used in this study.

Research setting

The study was conducted in the Village Lakhnour which is 5 km away from the college. It is a village of 168 houses with a population of 1080. Out of 168 houses, 76 houses have alcoholics and majority of them are men.

Study Population

People residing in the Village Lakhour of age group between 30-80 years.

Sampling size and sampling technique

76 alcoholics were selected by simple random sampling technique.

Research tool

The research tool consists of the following parts:

Part I: Socio-demographic variables consists of age, sex, education, occupation and income.

Part II: Alcohol Use Disorders Identification Test was used to collect the data.

- The score between 0-7 indicates low risk alcoholics.
- The score between 8-15 indicates moderate risk alcoholics.
- The score between 16-19 indicates high risk alcoholics.

- The score above 20 indicates very high risk alcoholics.

Ethical considerations

Permissions were taken from the Village Panchayat Leader and the concerned Medical Officers to conduct the study. A written consent was taken from the study subjects. Confidentiality and privacy of the study subjects were taken care off.

Procedure for data collection

Simple random sampling technique was used to select the subjects. After getting consent, they were asked to fill the AUDIT questionnaire. The data was collected for a week in the month of October 2018.

Data analysis

The analysis was done using descriptive statistics like mean and percentage and inferential statistics

such as chi-square test was used to find out the association between the variables. *p* value <0.05 was considered significant.

Results

Table 1 shows that majority (27) 35.5% of men are in the age group 30–40 yrs, (76) 100% of them are men, (22) 28.9% are having secondary school education, (29) 38.1% are farmers and (59) 77.6% having monthly income of Rs.10, 000-Rs.20, 000.

Figure 1 shows that majority 34 of the men 34 (44.7%) are high risk alcoholics, 32 (42.1%) are very high risk alcoholics and 10 (13.1%) are moderate risk alcoholics.

Table 2 shows that there is no significant association between the prevalence scores of alcoholic subjects and their demographic variables at the level of *p* > 0.05 significance.

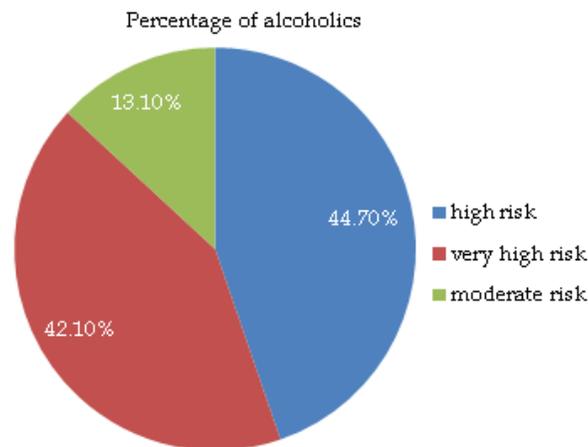
Table 1: Frequency and percentage distribution of demographic variables of the subjects

N = 76

Demographic variables	Frequency	Percentage (%)
<i>Age</i>		
30–40 yrs	27	35.5
41–50 yrs	16	21.0
51–60 yrs	15	19.7
61–70 yrs	14	18.4
71–80 yrs	4	5.26
<i>Sex</i>		
Male	76	100
Female	0	0
<i>Education</i>		
Illiterate	03	03.9
Primary	19	25.0
Secondary	22	28.9
Higher sec.	20	26.3
UG	12	15.7
PG	0	0
<i>Occupation</i>		
Labour	07	09.2
Farmer	29	38.1
Driver	07	09.2
Private Job	26	34.2
Student	01	01.3
Govt. Job	04	05.2
Nothing	02	02.6
<i>Income</i>		
Rs.10,000-Rs.20,000	59	77.6
Rs.21,000-Rs.30,000	10	13.1
Rs.31,000-Rs.40,000	04	05.2
Rs.41,000-Rs.50,000	03	03.9

Table 2: Association of demographic variables of subjects with their risk of alcoholism N = 76

Demographic variables	Low risk		High risk		Very high risk		Chi-square 0.05 significance
	f	%	f	%	f	%	
<i>Age</i>							
30-40 yrs	05	3.10	12	7.45	10	6.21	6.74(NS) <i>p</i> = 15.5 <i>df</i> = 8
41-50 yrs	03	1.86	05	3.10	08	4.96	
51-60 yrs	01	0.62	07	4.34	07	4.34	
61-70 yrs	01	0.62	09	5.59	04	2.48	
71-80 yrs	0	0	01	0.62	03	1.86	
<i>Sex</i>							
Male	10	6.21	34	21.11	32	19.8	0 (NS) <i>p</i> = 5.99 <i>df</i> = 2
Female	0	0	0	0	0	0	
<i>Education</i>							
Illiterate	0	0	0	0	03	1.86	9.44 (NS) <i>p</i> = 18.3 <i>df</i> = 10
Primary	02	1.24	11	6.83	06	3.72	
Secondary	03	1.86	07	4.34	12	7.45	
Higher sec.	02	1.24	11	6.83	07	4.34	
UG	03	1.86	04	2.48	05	3.10	
PG	0	0	0	0	0	0	
<i>Occupation</i>							
Labour	02	1.24	03	1.86	02	1.24	18.8 (NS) <i>p</i> = 21 <i>df</i> = 12
Farmer	03	1.86	13	8.07	13	8.07	
Driver	0	0	02	1.24	05	3.10	
Private.Job	05	3.10	08	4.96	13	8.07	
Student	0	0	01	0.62	0	0	
Govt.Job	0	0	01	0.62	03	1.86	
Nothing	0	0	06	3.72	01	0.62	
<i>Income</i>							
Rs.10,000-Rs.20,000	08	4.96	23	14.28	28	17.39	5.68 (NS) <i>p</i> = 12.5 <i>df</i> = 6
Rs.21,000-Rs.30,000	02	1.24	05	3.10	03	01.86	
Rs.31,000-Rs.40,000	0	0	01	0.62	01	0.62	
Rs.41,000-Rs.50,000	0	0	01	0.62	01	0.62	

**Fig. 1:** Frequency and percentage distribution of the variables according to the level of risk of alcoholism. N = 76

Discussion

The study shows that most of the alcoholics are males (100%) in the age group from 30-40 yrs (35%), are farmers (38.1%) and have family income of Rs.10,000-Rs.20,000 (77.6%). This finding is supported by an epidemiological survey of drug abuse was conducted in 24 rural villages of four Community Development Blocks (CDB) in

three districts of Punjab State bordering Pakistan covering 1276 households. The result shows that in males, the commonest drug used was alcohol (58.3%) and the majority of the female respondents were non-users.⁶

The age group affected by alcoholism in this study is supported by a survey conducted in Bangalore. The result shows that proportion of users was greater in town (15.7%) and among

26-45 years (67.4%). While, overall 17% of the users were heavy-users, frequent-heavy-drinking was more in slum and rural areas.⁹

Another study also supported this that out of a total of 1031 respondents, 23.7 percent were current users, 16.0 percent admitted of alcohol use in the past but were not current users, and 60.3 percent had never had alcoholic beverages. 19.0 percent of Chandigarh urban sample, 31.4 percent of Chandigarh rural sample and 45.9 percent of Jullundur rural sample were current users.⁷

Majority of the men 34 (44.7%) are high risk alcoholics, 32 (42.1%) are very high risk alcoholics and 10 (13.1%) are moderate risk alcoholics. This finding is supported by a study result shows that nearly one in four men (23.8%) had consumed alcohol in the past 12 months, while few (0.6%) women were consumers. Among drinkers, 33.2% (95% CI 28.6% to 38.1%) had AUDIT scores consistent with hazardous drinking, 3.3% (95% CI 2.1% to 5.1%) with harmful drinking and 5.5% (95% CI 3.8% to 8.0%) with dependent drinking.³

The present study also shows that there is no significant association between the prevalence scores of alcoholic subjects and their demographic variables at the level of $p > 0.05$ significance. This finding is supported by a survey conducted in 2018 shows that more than one-third of the sample respondents (38.6%, 95% CI = 29.2-48.8%) reported to be current drinkers and approximately one-fifth (21.7%, 95% CI = 4.2-31.7%) were heavy drinkers and 7.4% (95% CI = 4.6-11.6%) were heavy episodic drinkers. In multivariate analyses, age greater than 50 years (OR = 0.70, 95% CI = 0.56-0.86), being female (OR = 0.08, 95% CI = 0.06-0.09), schooling greater than 12 years (OR = 0.61, 95% CI = 0.50-0.75), owning land (OR = 0.74, 95% CI = 0.65-0.86), and living in pucca house (OR = 0.85, 95% CI = 0.74-0.98) were negatively associated with current drinking status. Higher income (OR = 1.30, 95% CI = 1.08-0.57) and living in urban areas (OR = 1.54, 95% CI = 1.33-1.78) were positively associated with current drinking status.¹⁰

Conclusion

According to a study conducted to assess the prevalence and pattern of alcohol use in a middle-aged and elderly population in Mumbai, India among 50, 220 men aged ≥ 45 years from the lower and lower-middle section of the general population shows that 18.8% were currently consuming

alcoholic beverages. The study concluded that abstinence, and also heavy and frequent use of alcohol, are common in this population and the latter is likely to have significant public health implications.⁸

The present study was conducted to assess the prevalence rate and alcoholic patterns, many more studies can be done on prevention and management of alcoholism. Alcohol damages the liver, heart, pancreas, lungs and kidneys. People who consume it are more prone to infections and have poor immunity. They tend to suffer from hypertension, obesity, diabetes, kidney failure, prostate and urology cancers.⁴ Hence alcoholism is a serious threat to the health of the country and proper action is needed at the grass-root level.

Conflict of interest: Nil

Source of funding: Self

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